Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)

2. (Currently Amended) The~~A~~ method according to claim11, wherein the indicating reactant is~~including using~~ a gaseous reactant.

3. (Currently Amended) The~~A~~ method according to claim 11~~2~~, wherein the indicating reactant is ~~including exposing said copper surface to~~ hydrogen sulfide gas.

4. (Currently Amended) The~~A~~ method according to claim 3, further comprising a~~the~~ step of forming the hydrogen sulfide gas by contacting ~~introducing~~ acetic acid with~~into~~ an aqueous solution of sodium sulfide ~~in deionized water at room temperature~~.

5. (Canceled)

6. (Currently Amended) The~~A~~ method according to claim 12~~5~~, wherein the indicating reactant is ~~including using~~ a gaseous reactant.

7. (Currently Amended) The~~A~~ method according to claim 13, further comprising a step of forming~~including producing~~ said hydrogen sulfide gas by contacting~~reacting~~ acetic acid with an aqueous solution of sodium sulfide.

8. (Withdrawn) An apparatus for detecting the presence of a residual amount of corrosion inhibitor on a copper surface subjected to a cleaning solution containing a corrosion inhibitor comprising in combination:

a first receptacle adapted to receive a test piece or pieces that have been exposed to cleaning solution,

a second receptacle placed inside said first receptacle proximate and said test pieces, said second receptacle adapted to receive reactants to produce a hydrogen sulfide gas; and

means to cover said first receptacle and direct said hydrogen sulfide gas at said test piece or pieces.

9. (Withdrawn) An apparatus according to claim 1 including sodium sulfide solution in said second receptacle.

10. (Withdrawn) An apparatus according to claim 9 including means to introduce an acid into said second receptacle prior to covering said first receptacle.

11. (Currently Amended) A method ~~for determining the absence of a residual amount of corrosion inhibitor~~ of treating~~on~~ a copper surface, ~~subjected to a cleaning solution containing a corrosion inhibitor~~ comprising in sequence the steps of:

a) cleaning said copper surface with a~~said~~ cleaning solution comprising a~~containing said~~ corrosion inhibitor, thereby leaving a residual amount of the corrosion inhibitor on the copper surface;

b) rinsing said ~~cleaned~~ copper surface, thereby forming a cleaned copper surface; and

c) exposing said ~~rinsed~~ cleaned copper surface to an indicating reactant that ~~reacts with said copper surface devoid of residual corrosion inhibitor causing a visible color change to said copper surface devoid of said residual corrosion inhibitor, wherein said~~ results in a visible color change to the cleaned copper surface within a predetermined time if the residual corrosion inhibitor has been removed from the copper surface by step b), and that does not result in said visible color change within the predetermined time if the corrosion inhibitor has not been removed from the copper surface by step b)~~color change indicates an absence of said corrosion inhibitor on said copper surface~~;

wherein step c) results in said visible color change.

12. (Currently Amended) The method according to claim 11, wherein the copper surface is a surface of a copper coupon and wherein steps a) and b) are performed with the copper coupon together in a batch with a microelectronic device comprising copper components, the method further comprising separating the copper coupon from the microelectronic device after step b) and before step c)~~A method for determining the absence~~

~~of residual corrosion inhibitor on copper surfaces or copper components of microelectronic devices having been subjected to a cleaning solution prior to a subsequent fabrication operation comprising the steps of:~~

~~including a sacrificial copper coupon or test piece in a group or batch of said devices during said cleaning process;~~

~~cleaning said group or batch and said sacrificial copper coupon or test piece;~~

~~removing said sacrificial copper coupon or test piece from said group or batch of said microelectronic devices; and~~

~~exposing said sacrificial copper coupon or test piece to a gaseous reactant selected to react with said sacrificial copper coupon or test piece to produce a visible color change on a surface said sacrificial copper coupon or test piece devoid of said corrosion inhibitor on said surface of said sacrificial copper coupon or test piece~~.

13. (Currently Amended) The~~A~~ method according to claim 12~~6~~, wherein the indicating~~said gaseous~~ reactant is hydrogen sulfide gas.

14. (Canceled)

15. (New) The method according to claim 4, wherein the step of forming the hydrogen sulfide gas comprises introducing the acetic acid into the aqueous solution of sodium sulfide.

16. (New) The method of claim 15, wherein the acetic acid is introduced at room temperature.

17. (New) The method according to claim 7, wherein the step of forming the hydrogen sulfide gas comprises introducing the acetic acid into the aqueous solution of sodium sulfide.

18. (New) The method of claim 17, wherein the acetic acid is introduced at room temperature.

19. (New) The method according to claim 3, further comprising a step of forming the hydrogen sulfide gas by contacting an acid selected from the group consisting of citric acid, ascorbic acid, hydrochloric acid and sulfuric acid with an aqueous solution of sodium sulfide.